

WHAT IS CLAIMED IS:

1. An optical disc apparatus comprising:

a detection signal generator which detects DC level fluctuation in a playback signal read from an optical disc and generates a detection signal tracking the DC level fluctuation;

a selection unit which selects the detection signal or a null signal without valid polarity based on the detection signal received from the detection signal generator;

a clamping unit which performs a clamping process to suppress DC level fluctuation in the playback signal based on the detection signal when the selection unit selects the detection signal, and which does not perform the clamping process when the selection unit selects the null signal; and

a signal processing unit which performs a specific signal process based on clamping unit output.

2. An optical disc apparatus as described in claim 1, further comprising a controller which generates a control signal instructing which signal to select;

wherein the selection unit selects a signal based on the control signal generated by the controller.

3. An optical disc apparatus as described in claim 2, wherein the controller again generates a control signal instructing selection of the detection signal when a read error occurs after generating a control signal instructing selection of the null signal a plurality of times.

4. An optical disc apparatus as described in claim 3, wherein the detection signal generator is an amplitude fluctuation sensing unit which

detects playback signal amplitude and generates an amplitude fluctuation signal.

5. An optical disc apparatus as described in claim 4 having a plurality of the detection signal generators and further comprising:

an amplitude fluctuation signal delay unit which delays the amplitude fluctuation signal generated by the amplitude fluctuation sensing unit, and generates an extended amplitude fluctuation signal extended by a delay period;

wherein the controller generates a control signal instructing selection of the extended amplitude fluctuation signal when a read error occurs after generating a control signal instructing selection of the amplitude fluctuation signal.

6. An optical disc apparatus as described in claim 5 wherein a recording guide groove wobbling at a specific period is formed on the optical disc, the optical disc apparatus further comprising:

a dropout detection unit which detects dropout of a wobble signal corresponding to the guide groove period when reading the optical disc, and generating a dropout detection signal; and

a signal delay unit which delays the dropout detection signal generated by the dropout detection unit, and generating an extended dropout detection signal that is extended for a delay period,

wherein the controller additionally generates a control signal instructing selection of the dropout detection signal, and generates a control signal instructing selection of the extended dropout detection signal when a read error occurs.

7. An optical disc apparatus for applying a specific signal process to

a playback signal read from an optical disc, comprising:

a digitizing unit which digitizes the playback signal and outputting

a digital playback signal;

a digital voltage generator which forms a feedback loop with the

- 5 digitizing unit to output a voltage signal such that a duty ratio of the digitized playback signal from the digitizing unit is a specific value;

a differential amplifier which outputs a differential signal between the playback signal and the voltage signal of the digital voltage generator; and

a signal processing unit which performs a specific signal process

- 10 based on the differential signal from the differential amplifier.